

## CLAIMS

What is claimed is:

- 1           1.     An apparatus comprising:  
2     a mounting portion to route at least one signal line from a first card connector on a circuit  
3         board to a first card connector on the mounting portion; and  
4     a routing portion to route at least one signal line from a second card connector on the  
5         circuit board to the mounting portion, the mounting portion to route the at least  
6         one signal line of the second card connector on the circuit board to a second card  
7         connector on the mounting portion.
- 1           2.     The apparatus of claim 1, the mounting portion and the routing portion  
2     comprising a single integrated component.
- 1           3.     The apparatus of claim 1, further comprising at least one other routing  
2     portion to route at least one signal line from a third card connector on the circuit board to  
3     the mounting portion, the mounting portion to route the at least one signal line of the  
4     third card connector on the circuit board to a third card connector on the mounting  
5     portion.
- 1           4.     The apparatus of claim 3, the routing portion and the at least one other  
2     routing portion comprising a compound routing portion.
- 1           5.     The apparatus of claim 1, the routing portion comprising a first riser and a  
2     second riser, the first riser to route the at least one signal line of the second card  
3     connector on the circuit board to the second riser, the second riser to route the at least one  
4     signal line of the second card connector on the circuit board to the mounting portion.
- 1           6.     The apparatus of claim 5, the first riser and the second riser comprising a  
2     single part.

1           7.     The apparatus of claim 5, the first riser oriented substantially transverse to  
2 the circuit board and the second riser oriented substantially parallel to the circuit board.

1           8.     The apparatus of claim 1, the routing portion comprising a flexible cable.

1           9.     An apparatus comprising:  
2 a circuit board;  
3 a processor disposed on the circuit board;  
4 a chip set disposed on the circuit board and coupled to the processor;  
5 a first card connector disposed on the circuit board and coupled to the chip set by at least  
6 one signal line;  
7 a second card connector disposed on the circuit board and coupled to the chip set by at  
8 least one signal line;  
9 a mounting portion secured in the first card connector on the circuit board, the mounting  
10 portion to couple the at least one signal line of the first card connector on the  
11 circuit board to a first card connector disposed on the mounting portion; and  
12 a routing portion secured in the second card connector on the circuit board, the routing  
13 portion to couple the at least one signal line of the second card connector on the  
14 circuit board to the mounting portion, the mounting portion to couple the at least  
15 one signal line of the second card connector on the circuit board to a second card  
16 connector disposed on the mounting portion.

1           10.    The apparatus of claim 9, further comprising a peripheral card secured in  
2 one of the first card connector on the mounting portion and the second card connector on  
3 the mounting portion.

1           11.    The apparatus of claim 10, the mounting portion to orient the peripheral  
2 card substantially parallel to the circuit board.

1           12.    The apparatus of claim 9, each of the at least one signal line of the first  
2 card connector on the circuit board and the at least one signal line of the second card  
3 connector on the circuit board comprising at least a REQ# line and a GNT# line.

1           13.    The apparatus of claim 9, the mounting portion and the routing portion  
2 comprising a single integrated component.

1           14.    The apparatus of claim 9, further comprising:  
2 a third card connector disposed on the circuit board and coupled to the chip set by at least  
3 one signal line; and  
4 at least one other routing portion secured in the third card connector on the circuit board,  
5 the at least one other routing portion to couple the at least one signal line of the  
6 third card connector on the circuit board to the mounting portion, the mounting  
7 portion to couple the at least one signal line of the third card connector on the  
8 circuit board to a third card connector disposed on the mounting portion.

1           15.    The apparatus of claim 14, the routing portion and the at least one other  
2 routing portion comprising a compound routing portion.

1           16.    The apparatus of claim 9, the routing portion comprising a first riser and a  
2 second riser, the first riser to couple the at least one signal line of the second card  
3 connector on the circuit board to the second riser, the second riser to couple the at least  
4 one signal line of the second card connector on the circuit board to the mounting portion.

1           17.    The apparatus of claim 16, the first riser and the second riser comprising a  
2 single part.

1           18.    The apparatus of claim 16, the first riser oriented substantially transverse  
2 to the circuit board and the second riser oriented substantially parallel to the circuit board.

1           19.     The apparatus of claim 9, the routing portion comprising a flexible cable.

1           20.     The apparatus of claim 9, the first card connector on the circuit board  
2 separated from the second card connector on the circuit board by at least one intervening  
3 card connector disposed on the circuit board.

1           21.     An apparatus comprising:  
2 a chassis;  
3 a circuit board disposed in the chassis;  
4 a processor disposed on the circuit board;  
5 a chip set disposed on the circuit board and coupled to the processor;  
6 a first card connector disposed on the circuit board and coupled to the chip set by at least  
7 one signal line;  
8 a second card connector disposed on the circuit board and coupled to the chip set by at  
9 least one signal line;  
10 a mounting portion secured in the first card connector on the circuit board, the mounting  
11 portion to couple the at least one signal line of the first card connector on the  
12 circuit board to a first card connector disposed on the mounting portion; and  
13 a routing portion secured in the second card connector on the circuit board, the routing  
14 portion to couple the at least one signal line of the second card connector on the  
15 circuit board to the mounting portion, the mounting portion to couple the at least  
16 one signal line of the second card connector on the circuit board to a second card  
17 connector disposed on the mounting portion.

1           22.     The apparatus of claim 21, further comprising a peripheral card secured in  
2 one of the first card connector on the mounting portion and the second card connector on  
3 the mounting portion.

1           23.     The apparatus of claim 22, the mounting portion to orient the peripheral  
2 card substantially parallel to the circuit board.

1           24.    The apparatus of claim 21, each of the at least one signal line of the first  
2 card connector on the circuit board and the at least one signal line of the second card  
3 connector on the circuit board comprising at least a REQ# line and a GNT# line.

1           25.    The apparatus of claim 21, the mounting portion and the routing portion  
2 comprising a single integrated component.

1           26.    The apparatus of claim 21, further comprising:  
2 a third card connector disposed on the circuit board and coupled to the chip set by at least  
3 one signal line; and  
4 at least one other routing portion secured in the third card connector on the circuit board,  
5 the at least one other routing portion to couple the at least one signal line of the  
6 third card connector on the circuit board to the mounting portion, the mounting  
7 portion to couple the at least one signal line of the third card connector on the  
8 circuit board to a third card connector disposed on the mounting portion.

1           27.    The apparatus of claim 26, the routing portion and the at least one other  
2 routing portion comprising a compound routing portion.

1           28.    The apparatus of claim 21, the routing portion comprising a first riser and  
2 a second riser, the first riser to couple the at least one signal line of the second card  
3 connector on the circuit board to the second riser, the second riser to couple the at least  
4 one signal line of the second card connector on the circuit board to the mounting portion.

1           29.    The apparatus of claim 28, the first riser and the second riser comprising a  
2 single part.

1           30.    The apparatus of claim 28, the first riser oriented substantially transverse  
2 to the circuit board and the second riser oriented substantially parallel to the circuit board.

1           31.     The apparatus of claim 21, the routing portion comprising a flexible cable.

1           32.     The apparatus of claim 21, the first card connector on the circuit board  
2 separated from the second card connector on the circuit board by at least one intervening  
3 card connector disposed on the circuit board.

1           33.     An apparatus comprising:  
2 first routing means for routing at least one signal line from a first card connector on a  
3 circuit board to a first card connector disposed on the first routing means; and  
4 second routing means for routing at least one signal line from a second card connector on  
5 the circuit board to the first routing means, the first routing means to route the at  
6 least one signal line of the second card connector on the circuit board to a second  
7 card connector disposed on the first routing means.

1           34.     The apparatus of claim 33, further comprising a third routing means for  
2 routing at least one signal line from a third card connector on the circuit board to the first  
3 routing means, the first routing means to route the at least one signal line of the third card  
4 connector on the circuit board to a third card connector disposed on the first routing  
5 means.

1           35.     The apparatus of claim 33, each of the first routing means and the second  
2 routing means to route one of an electrical signal and an optical signal.

1           36.     A method comprising:  
2 securing a mounting structure to a first card connector on a circuit board;  
3 routing at least one signal line from the first card connector on the circuit board to a first  
4 card connector on the mounting structure; and  
5 routing at least one signal line from a second card connector on the circuit board to a  
6 second card connector on the mounting structure.

1           37.    The method of claim 36, further comprising routing at least one signal line  
2 from a third card connector on the circuit board to a third card connector on the mounting  
3 structure.

1           38.    The method of claim 36, further comprising:  
2 routing at least a REQ# line and a GNT# line from the first card connector on the circuit  
3 board to the first card connector on the mounting structure; and  
4 routing at least a REQ# line and a GNT# line from the second card connector on the  
5 circuit board to the second card connector on the mounting structure.

1           39.    The method of claim 36, further comprising securing a peripheral card in  
2 one of the first card connector on the mounting structure and the second card connector  
3 on the mounting structure.